

REMARKS

Claims 1-9 and 11-23 are rejected under 35 U.S.C. §102(b) as being anticipated by Engellenner, U.S. Patent Number 6,057,756. Claim 10 is rejected under 35 U.S.C. §103(a) over Engellenner and Jenkins, et al., U.S. Patent No. 6,264,104. Claims 24-32 are rejected under 35 U.S.C. §103(a) over Engellenner and Johansson, U.S. Patent No. 5,913,163.

Rejections Under U.S.C. §102(b)

The present invention is directed to an automated storage system and method of use that has a storage unit with a plurality of individual defined areas for containing items. Operators interact with the automated storage system to retrieve one or more items, and to place or replace items within the storage system. The invention utilizes a headset and voice to interface with the automated storage unit such as to place an item in defined areas of the automated storage unit or to retrieve an item from a defined area of the automated storage unit. A voice input provides access to a database reflective of the automated storage unit and the defined areas therein, through a control computer or controller coupled to the database.

On the other hand, the Engellenner reference is merely concerned with simply locating an item utilizing an interrogation signal to find one or more tags on an item that is to be located. There is no

teaching or discussion of an automated storage unit and Engellenner is not at all concerned with placing items in an automated storage unit or retrieving items from specific defined areas of such a unit. Rather, as noted, Engellenner simply generates an interrogation signal to track down a particular item, regardless of where it might be located, in some room or area of a facility. As such, the Engellenner reference fails to teach each of the limitations set forth in the claims, and thus, fails to anticipate those claims under 35 U.S.C. §102(b).

Referring to the claims, all the independent Claims 1, 11, 18, and 24 have been amended to further clarify the invention. Additionally, various of the dependent claims have been amended as necessary.

Turning to Claim 1, that claim recites a method for placing an item in an automated storage unit having a plurality of individual defined areas. The method comprises the steps of receiving voice input utilizing a headset, wherein the voice input relates to an item identifier for an item in a defined area of the automated storage unit. In response to the voice input, an interface is made with a control computer that is coupled to a database reflective of the automated storage unit. The control computer uses the item identifier information with the database to generate location information for the item that is reflective of an individual defined area of the automated storage unit. The location information is output to the headset in the form of a voice prompt indicative of a location in the automated storage unit. Claim 1 further recites the step of receiving a

status message through the headset regarding placement of the item in the defined area of the unit. That is, once an operator or user has determined a particular individual defined area within the automated storage unit, they may place an item in that location and confirm placement of a specific location.

As noted above, because the Engellenner reference is merely directed to finding items using an interrogation signal, there is absolutely no teaching or suggestion in Engellenner of a method to place an item in an automated storage unit. There is no teaching of the step of receiving a voice input utilizing a headset, wherein the voice input relates to an item identifier for an item that is in a defined area of an automated storage unit. Furthermore, there is no teaching in Engellenner of interfacing with a control computer coupled to a database that is reflective of the automated storage unit. Again, Engellenner is merely concerned with retrieving an item, it is not concerned with the ultimate positioning of that item, other than to find it.

Engellenner certainly does not provide any teaching with respect to the step of interfacing with a control computer coupled to a database that is reflective of the automated storage unit. Nor does Engellenner teach using the item identifier information in the reflective database to generate location information for the item that is reflective of an individual defined area of the storage unit. Engellenner is focused on interrogation signals sent through an area. Furthermore, since

Engellenner is merely concerned with finding an item, there is no teaching in Engellenner with respect to receiving a status message, though a headset, regarding placement of the item in a defined area in the automated storage unit.

Accordingly, because Engellenner fails to teach all of the elements recited in Claim 1, Engellenner cannot anticipate that claim under 35 U.S.C. §102(b). Claims 2, 4, and 6 are cancelled, but the remaining Claims 3, 5, 7-10 all depend from independent Claim 1, and thus, would be allowable for the stated reasons. Furthermore, each of those claims recites a unique combination of steps that are not anticipated or rendered obvious by the cited art. Therefore, Claims 1, 3, 5, and 7-10 are allowable.

With respect to Claim 11, that claim recites a method of retrieving an item in an automated storage unit having a plurality of individual defined areas for containing items. The method comprises the steps of using a headset to capture a voice input of a user relating to an item identifier for an item in a defined area of the automated storage unit. The method further includes the step of transmitting the item identifier through a wireless interface, to a controller of the automated storage unit, and interfacing with a database coupled to the controller that is reflective of the automated storage unit. Claim 11 further recites generating location information for the item that is reflective of an

individual defined area of the storage unit, and then outputting a voice prompt, through the headset, that is indicative of the location information.

As noted above, the Engellenner reference does not teaching utilizing an item identifier and interfacing with a database coupled to a controller that is reflective of the automated storage unit, and thereby generating location information for the item that is reflective of an individual defined area of the storage unit. Rather, Engellenner merely interrogates spaces looking for tags or other circuits that are on a particular item. There is no teaching or discussion with respect to an automated storage unit having a plurality of individual defined areas, nor is there teaching with respect to interfacing with a database reflective of the automated storage unit in generating location information for an item that is reflective of an individual defined area of the storage unit.

Accordingly, Claim 11 cannot be anticipated under 35 U.S.C. §102(b) by Engellenner, because the Engellenner reference simply does not teach all the limitations recited in Claim 11.

Claims 12 and 14 are cancelled.

The remaining Claims 13 and 15-17 each depend from Claim 11, and thus, would be allowable for the reasons noted above. Furthermore, those claims each recite a unique combination of method steps, which are not anticipated by the cited art. As such, Claims 11, 13, and 15-17 are allowable.

Claim 18 has also been amended and recites a voice-controlled automated storage system, including an automated storage unit, having a plurality of individual defined areas for containing items. Claim 18 further recites an input device, including a headset configured to receive voice input indicative of an item identifier of an item in a defined area of the automated storage unit. Claim 18 recites an interface coupled with the input device, and in communication with the controller of the automated storage unit, so as to forward the item identifier to the controller, wherein the controller accesses a database reflective of the automated storage unit, and generates location information for the item identified that is reflective of an individual defined area of the storage unit. Again, Engellenner does not at all teach a voice-controlled automated storage system that includes an automated storage unit and an input device configured to receive a voice input, and to use the item identifier information associated with the voice input for accessing a database reflective of the automated storage unit to generate location information that is reflective of an individual defined area of the storage unit. Because the absence of the teaching of any such elements in the Engellenner reference, that reference could not anticipate Claim 18 under 35 U.S.C. §102(b).

Claims 19-23 each depend from Claim 18, and thus, would be allowable for the reasons noted above. Furthermore, each of those dependent claims recites a unique combination of elements, which are not taught by Engellenner. Accordingly, Claims 18-23 are allowable over the cited art.

Rejections Under U.S.C. §103

Claim 10 was rejected under 35 U.S.C. §103(a) over the combination of Engellenner and Jenkins, et al. Claim 10 depends from Claim 1, and thus, includes all limitations therein. For the reasons discussed above, Claim 10 is in allowable form. The Jenkins, et al. reference is merely recited to by the Examiner regarding a status message that comprises one of confirmation of an item being placed in the automated storage unit or report of an error when placing the item in the automated storage unit. As such, the Jenkins, et al. does not provide the teachings, which are lacking in Engellenner such that the combination would render the claims obvious. In fact, Jenkins, et al. does not even teach a status message to confirm an item placed in the storage unit or to report an error in such placement. Therefore, Claim 10 would not be rendered obvious by the combination of Engellenner and Jenkins, et al. Accordingly, Claim 22 is an allowable form.

Claims 24-32 are rejected as obvious over a combination of Engellenner and Johansson. The Johansson reference is cited for teaching a wireless headset only, as noted by the Examiner on Page 7 of the Office Action. However, the Johansson reference does not provide any of the teachings that are missing in Engellenner such that a combination of Engellenner and Johansson would render obvious Claims 24, and 26-32. Claim 25 has been cancelled.

More specifically, Claim 24 recites an automated storage system comprising an automated storage unit having a plurality of individual defined areas for containing items. Claim 24 further recites a control computer, coupled with the storage unit via a wireless interface, wherein the control computer is in communication with a database reflective of the automated storage unit. The Engellenner reference provides no teaching of such an automated storage unit, nor does it provide any teaching or suggestion of a control computer, coupled with the storage unit via a wireless interface, wherein the control computer is in communication with the database reflective of the automated storage unit.

Claim 24 further recites at least one headset configured to receive voice input that is indicative of an item identifier for an item in a defined area of the automated storage unit, and which forwards the item identifier via the interface to the control computer. Claim 24 further recites that the control computer, in response to the input of the item

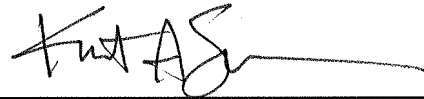
identifier, is operable to generate a location information for an item that is reflective of an individual defined area of the storage unit. Such limitations are not, at all, taught or suggested by Engellenner nor the combination of Engellenner and Johansson. As such, Claim 24 cannot be rendered obvious under 35 U.S.C. §103(a) based on that combination of references. Each of Claims 26-32 depend from Claim 24, and thus, include the limitations therein. Furthermore, those claims recite unique combinations of elements, which are not rendered obvious by Engellenner/Johansson. Accordingly, Claims 24 and 26-32 are in an allowable form.

Applicant notes that all of the currently-pending claims are in an allowable form over the recited art, and respectfully requests an indication of their allowability at the Examiner's earliest convenience. If any issues remain in the case which might be handled in an expedited fashion, such as through an Examiner's Amendment, the Examiner is certainly encouraged to telephone the Applicant's undersigned representative to discuss such issues and to further expedite prosecution.

Applicant is submitting the fee due for the a one-month extension of time with this response. If any additional fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to deposit account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

A handwritten signature in black ink, appearing to read "Kurt A. Summe", written over a horizontal line.

Kurt A. Summe
Reg. No. 36,023

2700 Carew Tower
441 Vine Street
Cincinnati, Ohio 45202
(513) 241-2324
(513) 241-6234 facsimile

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